

What is claimed is:

1. A method of providing electrical pulses to one or both vagus nerve(s) and its branches of a patient to provide therapy for at least one of atrial fibrillation, 5 congestive heart failure, inappropriate sinus tachycardia, and refractory hypertension, comprising the steps of:
  - a) providing a stimulation means, wherein said stimulation means comprising implantable and external components;
  - b) providing programmer means, wherein said programmer means comprising means for networking with remote computers for data exchange; and
  - c) programming said stimulation means with said programming means; whereby, said therapy is provided by said electrical pulses.
2. The method of claim 1, wherein said stimulation means comprises an 15 implantable pulse generator with at least two fixed programs which are activated with a magnet.
3. The method of claim 1, wherein said external component is an 20 external magnet.
4. The method of claim 1, wherein said external component is an external stimulator.
5. The method of claim 4, wherein said external stimulator further 25 comprises telemetry means for networking.
6. The method of claim 1, wherein said programmer further comprises a telemetry unit for networking.
7. The method of claim 6, wherein said programmer means can be 30 remotely operated over a wide area network.
8. The method of claim 1, wherein said stimulation means comprises,

- a) an implanted stimulus-receiver; said stimulus-receiver comprising circuitry and a high-value capacitor for storing charge; and
- b) an external stimulator for delivering power and data.

5           9. The method of claim 1, wherein said implantable components comprise an implantable pulse generator (IPG) with a recharging coil for recharging the implantable pulse generator using an external power source.

10          10. A method of providing electrical pulses to one or both vagus nerve(s) and its branches of a patient, with a stimulation means comprising implanted and external components to provide therapy for at least one of atrial fibrillation, congestive heart failure, inappropriate sinus tachycardia, and refractory hypertension, comprising the steps of:  
15           a) providing implantable pulse generator means;  
              b) providing an external stimulator means and programming means;  
              c) providing a lead in connection with said implantable pulse generator means, and adapted to be in contact with the said vagus nerve(s); and  
              d) selectively operating said implantable pulse generator means or external stimulator means  
20           whereby, said therapy is provided with pulsed electrical stimulation.

11. The method of claim 10, wherein said programmer means are remotely operated a wide area network.

25          12. The method of claim 10, wherein said external stimulation means are remotely controlled over a wide area network.

13. A method of providing therapy for congestive heart failure (CHF) using electrical pulses to a vagus nerve, comprising the steps of:  
30           a) providing implantable stimulation means wherein, said stimulation means comprises implanted or external power source, to provide electrical pulses to said vagus nerve;

b) providing programmer means external to the body for programming said stimulation means;

whereby, said electrical pulses supplied to said vagus nerve provide therapy for congestive heart failure.

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14. The method of claim 13, wherein said stimulation means comprises an implantable pulse generator with fixed programs which is controllable with a magnet.

15. The method of claim 13, wherein said programmer means are  
10 remotely operated over a wide area network.

16. The method of claim 13, wherein said stimulation means can be remotely controlled over a wide area network.

15 17. The method of claim 13, wherein said implantable components  
comprise an implantable pulse generator (IPG) with a recharging coil for recharging  
the implantable pulse generator using an external power source

18. A method to increase the cardiac parasympathetic tone in a patient  
20 using pulsed electrical stimulation to a vagus nerve, comprising the steps of:

a) providing implantable stimulation means wherein, said stimulation means comprises implanted or external power source, to provide electrical pulses to said vagus nerve;

25 b) providing programmer means external to the body for programming  
said stimulation means;  
whereby, said pulsed electrical stimulation to said vagus nerve leads to  
increased cardiac parasympathetic tone.

19. The method of claim 18, wherein said stimulation means comprises an  
30 implantable pulse generator with fixed programs which is controllable with an  
external magnet.

20. The method of claim 18, wherein said programmer means are  
remotely operated via the internet.

21. The method of claim 18, wherein said stimulation means can be  
5 remotely controlled over a wireless wide area network.

22. The method of claim 18, wherein said implantable components  
comprise an implantable pulse generator (IPG) with a recharging coil for recharging  
the implantable pulse generator using an external power source.

10 23. A system of providing electrical pulses to one or both vagus nerve(s)  
and its branches of a patient, with a combination of implanted and external  
components to provide therapy for at least one of atrial fibrillation, congestive heart  
failure, inappropriate sinus tachycardia, and refractory hypertension, comprising:

15 a) a stimulation means; wherein said stimulation means comprising  
implantable and external components;  
b) programming means; wherein said programming means comprising  
means for networking with remote computers for data exchange; and  
c) programming said stimulation means with said programming means;  
20 whereby, said electrical pulse therapy is provided as programmed.

24. The system of claim 23, wherein said stimulation means comprises an  
implantable pulse generator with at least two fixed programs which are activated with  
a magnet.

25 25. The system of claim 23, wherein said external component is a magnet.

26. The system of claim 23, wherein said external component is an  
external stimulator.

30 27. The system of claim 26, wherein said external stimulator further  
comprises telemetry means for networking.

28. The system of claim 23, wherein said programmer means can be  
remotely operated over a wide area network.

29. The system of claim 23, wherein said implantable components  
5 comprise an implantable pulse generator (IPG) with a recharging coil for recharging  
the implantable pulse generator using an external power source.

30. The system of claim 23, wherein said stimulation means comprises,  
a) an implanted stimulus-receiver; said stimulus-receiver comprising  
10 circuitry and a high-value capacitor for storing charge; and .  
b) an external stimulator for delivering power and data.